

chinango, 4900 ft., *Sharp 441204*. This collection is represented at the Gray Herbarium, and the herbaria of the Smithsonian Institution, the Instituto Biológico de México and the University of Tennessee.

My sincere thanks are given to the Director of the Gray Herbarium and the Curator of the U. S. National Herbarium for the loan of *Tovara* material.—AARON J. SHARP.

WOLFFIA PAPULIFERA IN TEXAS.—In the eighth edition of Gray's Manual (p. 387. 1950), the late Prof. M. L. Fernald assigned to *Wolffia papulifera* C. H. Thompson a range from Virginia to Illinois, south to Kentucky, Missouri, Kansas, and Mexico. The year before the Manual was issued it had been recorded from Columbia County in north central Florida by Don L. Jacobs (*Amer. Midl. Nat.* **42**: 110–111. fig. 1. 1949), who suggested that it should be looked for in the region from Georgia to Texas and Missouri. At the Florida station it was accompanied by *Wolffia columbiana* Griseb. and *Lemna perpusilla* Torr., both of which were in abundant flower on 20 September, although no flowers of *W. papulifera* were seen. Since that time it has been reported from southwestern Georgia by R. F. Thorne (*Castanea* **16**: 35. 1951), and from several localities in Maryland by Neil Hotchkiss (*Rhodora* **53**: 92. 1951). It can now be recorded from Texas.

The Texas occurrence was on the ranch of Mr. Hamilton Wilson, in and along the west line of Kerr County (south-central Texas), about 20 miles west of Hunt, 23 miles NNE of Leakey, and 90 miles NW of San Antonio, on the divide between the headwaters of the Rio Frio and the South Fork of the Guadalupe River. Abundant fresh material, including many plants in flower and fruit, was sent in Nov. 1950 to the Bureau of Plant Industry, Soils, and Agricultural Engineering by Dr. R. D. Radeleff, veterinarian at the Bureau of Animal Industry station at Kerrville. According to information supplied in February, 1951, by Dr. Radeleff, the plant was first noticed by Mr. Wilson in small numbers two years before on a small fresh water pond fed by springs and with an underground outflow. During the past year the plant had reproduced rapidly, on still days completely covering the pond, which is about 30 by 300 ft. and less than 3 ft. deep at all points. With a light breeze, the plants would accumulate to the depth of several inches on the lee side. The

cattle, in order to drink, would often submerge their faces up to the eyes in the water, producing the curious phenomenon of green faces on red cattle, from the abundance of the clinging *Wolffia*. When fall calving began almost all the calves were still-born. Attributing this to the influence of the *Wolffia*, Mr. Wilson shifted his cattle to another pasture and found that the trouble ceased. He had not previously had any difficulty of this sort with his cattle. Later, at the suggestion of Dr. Radeleff, he treated the water with copper sulphate at the rate of 10 parts per million in the estimated volume of water and apparently eliminated the plant, but not long afterward it reappeared and again covered the pond. About a year later he again put his cattle in the old pasture about the pond but had no further difficulties with them, so that the *Wolffia* was evidently not responsible for his previous losses.—S. F. BLAKE, DIVISION OF PLANT EXPLORATION AND INTRODUCTION, U. S. D. A., BELTSVILLE, MARYLAND.

NEW PLANT RECORDS FOR ILLINOIS.—These plants, which were collected by the author in Henry County, comprise new additions to the known flora of Illinois. Specimens of all of these plants were determined at, and deposited in, the Gray Herbarium of Harvard University.

HETEROTHECA SUBAXILLARIS (Lam.) Britt. & Rusby—Along railroad tracks in Section 7, Edford Township, September 17, 1944.

ELAEAGNUS ANGUSTIFOLIA L.—The Russian Olive seems to be rapidly spreading from cultivation in Henry County. On June 16, 1945 a small tree was found on the high terrace border of the Geneseo Creek in Section 28, Geneseo Township, and on June 14, 1951 a larger tree was found in a dense roadside thicket in Section 32, Kewanee Township.

GALIUM MOLLUGO L.—My first specimens were found along railroad tracks in Section 18, Geneseo Township, June 9, 1948. The specimens which were deposited in the Gray Herbarium were collected from the same colony, June 26, 1951.

HYPERICUM DISSIMULATUM Bickn.—Low wet meadow in Section 16, Phenix Township, August 14, 1947, with the suggestion from the Gray Herbarium that it confirms, at least in part, the opinion expressed by the late Professor M. L. Fernald in the eighth (1950) edition of Gray's Manual, that it might be a hybrid of either *H. boreale* (Britt.) Bickn. or *H. mutilum* L. and *H. canadense* L.

VIBURNUM RECOGNITUM Fern.—Low wet woodlands bordering Crescent Lake in Section 15, Oxford Township, July 15, 1947.—RAYMOND J. DOBBS. GENESEO, ILLINOIS.